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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,564	03/30/2001	Gina Danielle Venolia	M61.12-0329	7211

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EXAMINER

RIES, LAURIE ANNE

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/822,564

Applicant(s)

VENOLIA, GINA DANIELLE

Examiner

Laurie Ries

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to communications: amendment, filed 4 March 2005, to the original application filed 30 March 2001.

Claims 1-22 are pending. Claims 1, 15 and 18 are independent claims.

Response to Arguments

Applicant's arguments, see amendment, filed 4 March 2005, with respect to the rejection(s) of claim(s) 18-22 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of 35 U.S.C. 102(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-10, and 12-22 are rejected under 35 U.S.C. 102(b) as being anticipated by King (U.S. Patent 5,953,541).

As per claim 1, King discloses a method of providing selected text into a computer including (a) having the computer select a character in a range of characters, (b) having the

computer select a word as a function of the selected, (c) presenting the word to the user, and (d) receiving an action from the user pertaining to the selected character (See King, Figure 5B, and Column 27, lines 9-25).

As per claim 2, King discloses the limitations of claim 1 as described above. King also discloses that the receiving step includes an indication that a desired character is in a range alphabetically preceding or alphabetically succeeding the selected character (See King, Figure 5D, and Column 27, lines 38-42), and that steps (a) - (d) are repeated where the range of characters is bounded by the selected character (See King, Figures 5A-5K, and Column 27, lines 29-65).

As per claim 3, King discloses the limitations of claim 2 as described above. King also discloses that receiving step includes receiving an indication to retain the selected character as one of a set of retained characters (See King, Column 10, lines 34-53), and that steps (a) - (d) are repeated where having the computer select a word includes having the computer select a word as a function of the set of retained characters (See King, Column 11, lines 40-67, and Column 12, lines 1-4).

As per claim 4, King discloses the limitations of claim 2 as described above. King also discloses that receiving step includes receiving an indication to accept the set of characters, where steps (a) - (d) are repeated with the set of retained characters including an empty set and the range of characters including a full range of characters (See King, Column 10, lines 47-53, lines 54-67, Column 11, lines 1-29, Figure 1A, element 56, and Column 3, lines 51-54).

As per claim 5, King discloses the limitations of claim 4 as described above. King also discloses that the receiving step includes receiving an indication to remove a character from the

set of retained characters, and that steps (a) - (d) are repeated (See King, Column 23, lines 38-65).

As per claim 8, King discloses the limitations of claim 3 as described above. King also discloses successively repeating steps (a) and (d) where having the computer select a character includes having the computer select a character as a function of a refined range of characters for each succession (See King, Column 27, lines 9-25).

As per claim 9, King discloses the limitations of claim 8 as described above. King also discloses that successively repeating steps (a) and (d) occurs when a new word cannot be selected in step (b) (See King, Column 28, lines 10-14).

As per claim 10, King discloses the limitations of claim 8 as described above. King also discloses having the computer select a character as a function of the set of retained characters (See King, Column 27, lines 9-17).

As per claim 12, King discloses the limitations of claim 3 as described above. King also discloses receiving an indication to retain a number of characters of the word in the set of retained characters (See King, Column 27, lines 43-55).

As per claim 13, King discloses the limitations of claim 3 as described above. King also discloses receiving an indication to present only the retained set of characters (See King, Column 27, lines 38-42).

As per claim 14, King discloses the limitations of claim 1 as described above. King also discloses receiving an indication to set the range of characters to a selected set of characters (See King, Column 27, lines 56-65).

As per claim 15, King discloses a method of providing selected text into a computer including (a) having the computer select a word as a function of a set of retained characters, (b) presenting the word to the user, and (c) receiving an action from the user pertaining to a character in the word following the set of retained characters (See King, Figure 5B, and Column 27, lines 9-25).

As per claim 16, King discloses the limitations of claim 15 as described above. King also discloses receiving an indication that a desired character to be added to the set of retained characters alphabetically precedes or alphabetically succeeds the presented word (See King, Figure 5D, and Column 27, lines 38-42), and that steps (a) - (c) are repeated where the range of words is bounded by the presented word (See King, Figure 5C, and Column 27, lines 29-37).

As per claim 17, King discloses the limitations of claim 16 as described above. King also discloses receiving an indication to retain a character of the word following characters of the word corresponding to the set of retained characters (See King, Figure 5D, and Column 27, lines 38-42), and that steps (a) - (c) are repeated where having the computer select a word includes having the computer select a word as a function of the new set of retained characters (See King, Figure 5F, and Column 27, lines 43-65).

As per claim 18, King discloses a computing device including an input device (See King, Column 8, lines 49-55), an output device (See King, Column 9, lines 14-20), memory storing a lexicon (See King, Column 9, lines 32-47), a processor accessing the memory (See King, Column 9, lines 30-32), and a module executable on processor, the module selecting a character in a range of characters, selecting a word from the lexicon as a function of the selected character, presenting the word to the user through the output device, and receiving an action from the user.

through the input device pertaining to the selected character (See King, Figure 5B, and Column 27, lines 9-25).

As per claim 19, King discloses the limitations of claim 18 as described above. King also discloses that the input device includes isolated buttons indicative of different responses (See King, Figure 5B, element 56).

As per claim 20, King discloses the limitations of claim 19 as described above. King also discloses that at least some of the buttons are indicative of a subset of the alphabet (See King, Figure 5B, element 56).

As per claim 21, King discloses the limitations of claim 20 as described above. King also discloses that the computing device includes a telephone (See King, Column 1, lines 41-45).

As per claim 22, King discloses the limitations of claim 19 as described above. King also discloses that the computing device includes a pager (See King, Column 7, lines 12-15).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over King (U.S. Patent 5,953,541), as applied to claims 3 and 10 above, and further in view of Connolly (U.S. Patent 6,005,495).

As per claims 6 and 7, King discloses the limitations of claim 3 as described above. King does not disclose expressly that the step of having the computer select a character includes having the computer select the character as a function of a probability of the character in the range of characters and that the step of having the computer select a word includes having the computer the word as a function of a probability of the word. Connolly discloses selecting a character as a function of a probability of the character in the range of characters (See Connolly, Column 3, lines 45-47, and Figure 4, element 450) and selecting a word as a function of a probability of the word (See Connolly, Column 2, lines 41-55). King and Connolly are analogous art because they are from the same field of endeavor of entering text on a device with a limited display area. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the selection of a character and a word as a probability of the character in the range of characters and the word as a function of a probability of the word, respectively, of Connolly, with the method of selecting a character and a word of King. The motivation for doing so would have been to determine the entry which is most likely to be entered next by the user and return that entry (See Connolly, Column 3, lines 48-53). Therefore, it would have been obvious to combine Connolly with King for the benefit of predicting the next entry by the user to obtain the invention as specified in claims 6 and 7.

As per claim 11, King discloses the limitations of claim 10 as described above. King does not disclose expressly having the computer select the character as a function of an N-gram model. Connolly discloses that selecting the character includes selecting the character as a function of an N-gram model. King and Connolly are analogous art because they are from the same field of endeavor of entering text on a device with a limited display area. At the time of the

invention it would have been obvious to a person of ordinary skill in the art to include the selection of a character as a function of an N-gram model of Connolly with the method of selecting a character of King. The motivation for doing so would have been to limit the possible characters available for the next selection and thereby increase the probability of a correct prediction of the user's choice (See Connolly, Column 3, lines 34-53). Therefore, it would have been obvious to combine Connolly with King for the benefit of increasing the possibility of a correct prediction of the user's next entry to obtain the invention as specified in claim 11.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurie Ries whose telephone number is (571) 272-4095. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Field, can be reached on (571) 272-4090.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LR



SANJIV SHAH
PRIMARY EXAMINER